

DELTA LEVEE SUBVENTIONS PROGRAM PROCEDURES AND CRITERIA

September 21, 2007

The following administrative provisions set forth the requirements for State financial assistance to local agencies for nonproject and eligible project levee maintenance and rehabilitation activities and guide the State administration of the program.

PART I

ADMINISTRATIVE PROVISIONS

Article 1 DEFINITIONS

1.1 "Board" means The Reclamation Board.

1.2 "Corps" means the U.S. Army Corps of Engineers.

1.3 "Delta" means the Sacramento-San Joaquin Delta as described in Section 12220 of the Water Code.

1.4 "DFG" means the Department of Fish and Game.

1.5 "Department" means the Department of Water Resources.

1.6 "District" means a Reclamation District or other local agency which has jurisdiction over the maintenance and rehabilitation of nonproject levees in the Delta.

1.7 "District Operations" means work that is done by District Owned Equipment and work forces on the payroll of the Reclamation District. For Districts made up of ten owners or less, District Operations may also include levee work accomplished by farmer-owned equipment and farm work forces. For these Districts, the identity of the landowners and the District are substantially the same.

1.8 "FEMA" means the Federal Emergency Management Agency.

1.9 "Force Account Work" means work arrangements defined in terms of engaging labor, services, or equipment on a per time unit basis.

1.10 "Levee system" means all the levees (both project and non-project) which protect an area of benefit.

1.11 "Local agency" means any city, county, district or other political subdivision of the State which is authorized to maintain levees.

1.12 "Nonproject levee" means a local flood control levee in the Delta that is not a project facility under the State Water Resources Law of 1945, as shown on page 38 of the Department of Water Resources Sacramento-San Joaquin Delta Atlas, dated 1993.

1.13 "Project levee" means a federal flood control levee that is a project facility under the State Water Resources Law of 1945 Chapter 1 (commencing with section 12570) and Chapter 2 (commencing with Section 12639) of Part 6, if not less than the majority of acreage within the jurisdiction of the local agency that maintains the levee is within the primary zone of the Delta, as defined in Section 29728 of the Public Resources Code.

1.14 "Reasonable Competition": This concept is generally applicable in cases where only one bid or no bids are received for a particular levee project, as it applies to Section 20925 that was added to the Public Contract Code by SB 1893. Reasonable Competition involves the expectation that through bidding or negotiation the lowest reasonable price for a certain unit of work or work improvement will be realized.

1.15 " Work subject to SB 1893": As defined by SB 1893, this work includes "any improvement or unit of work". In the context of the Subventions Program, this work includes all levee rehabilitation and maintenance activities, except where such work is done as part of District Operations.

Article 2 PLANS

2.1 Long-Range Plans

Long-range plans shall consist of:

- a. A map showing the levee system on which project levees, non-project levees under jurisdiction of the local agency, and the ownership of non-project levees which are not under jurisdiction of the local agency, if any, are clearly identified.
- b. An inventory of the non-project and eligible project levees.
- c. Either engineering plans or a statement setting forth the local agency's long-range plans and methods for maintenance and rehabilitation of the non-project and eligible project levees in the system, including plan for preservation and planting of levee vegetation where vegetation on the levee section is acceptable. The plans should describe the local agency's existing maintenance schedule for the entire non-project and eligible project levee system, and the schedule for post-rehabilitation maintenance, if such maintenance is expected to occur on a different schedule. The plans should also describe the local agency's long-range goal for flood protection (i.e., Short-Term Hazard Mitigation Plan Standards, PL 84-99 Standards, Bulletin 192-82 criteria, or other applicable standard).

- d. The local agency's method of ensuring the maintenance and rehabilitation of the portions of the system's non-project and eligible project levees, if any, which are not under its jurisdiction.
- e. The target date for completion of levee rehabilitation.
- f. An estimate of the cost of annual routine maintenance and the total cost of rehabilitation. Also, an estimate of the cost of any mitigation measures, required by DFG to ensure that no net long-term loss and net long-term improvement of habitat, if available.
- g. All plans and schedules for levee improvement submitted to FEMA pursuant to the State Flood Hazard Mitigation Plan, Disaster Declaration FEMA-758-DR-CA (1986).
- h. An inventory of non-project and eligible project levees, consisting of:
 - (1) A map of the levees at a scale of 1"= 2,000' or larger;
 - (2) The establishment of a levee mile or station designation and marking on the ground such mile or station designations at one-half mile or 2,500-foot intervals;
 - (3) A profile of the centerline of the levees;
 - (4) Typical cross-sections of the existing levee and cross-sections at problem areas from the landside levee toe to under water levee toe or its adjacent berm. Sections should be taken at the beginning and end of transitions between materially different levee cross sections;
 - (5) The location, plan, and description (elevations where pertinent) of all encroachments on, over or through the levee section.
 - (6) Such other material or information pertinent to the inventory that the local agency may have submitted to FEMA, under the 1986 State Plan as referred to in subsection (g).
 - (7) Drawings showing the dimensions (length, width, and depth, in feet) of the proposed worksites, including all borrow areas or dredge areas.
- i. Provisions for the acquisition of any easements on and adjacent to the levee where the Department has made the determination required by Water Code Section 12987 that an easement for open space and minimum tillage of the soil is desirable to maintain the structural stability of the levee.
- j. Plans indicating proposed land use changes, if any.

k. A plan to compensate for any impacts to fish, wildlife or riparian habitat caused by levee rehabilitation or maintenance. The plan shall meet the goal of no net long-term loss and net long-term improvement for these habitats.

2.2 Annual Routine Maintenance Plans

Maintenance plans shall cover work to be performed on a fiscal year (July 1 to June 30) basis. They shall be in the form of a statement setting forth the local agency's planned maintenance within the scope of Section 5.I of Part II (Criteria). An estimate shall be prepared showing the cost of each major activity and the year's total maintenance cost. When a statement will not adequately describe the work, it shall be shown on engineering plans or sketches. In addition the following information shall be included:

- a. A map, aerial photo, or engineering drawing showing the actual (or anticipated) locations and dimensions of the areas where maintenance will occur for the appropriate fiscal year, including, but not limited to, borrow areas, dredge areas, areas to be sprayed, disked, burned, or mechanically cleared, and areas where revetment must be replaced.
- b. A description of the maintenance schedule and how it applies to the areas under consideration for reimbursement (i.e. length of time between maintenance treatments).

2.3 Rehabilitation Plans

Rehabilitation plans shall cover work to be performed on a fiscal year (July 1 to June 30) basis. The plan shall be shown on an engineering drawing. The plan must show details of riparian vegetation or wildlife or fisheries habitat within the work area that will be disturbed and any proposed revegetation or mitigation measures the agency will take.

An estimate shall be prepared showing the cost of each major activity and the total cost of the planned rehabilitation. Rehabilitation plans will conform to Section 6.1 of Part II-Criteria of this document.

2.4 Plan Revisions

To the extent that there is a significant change in the Maintenance or Rehabilitation Plan(s), the local agency shall inform the Department in writing. Depending on the type of plan revision, approval may be required from one or more of the following agencies: Department, DFG, and/or Board.

2.5 Disaster Assistance

For applications made pursuant to Water Code Section 12993, the following conditions apply: This work, which was denied for reimbursement by both FEMA and OES, under Public Law 93-288, must have been denied for reasons of levee improvement or normal levee maintenance work. Work items under this category

must be clearly and separately indicated on the agency's work plan. Damage Survey Reports (DSR's) and/or other pertinent documentation must be included with the agency's application as well as evidence of all costs incurred for the work performed. The fiscal year limitation for work performed under the Rehabilitation or Maintenance Plans does not apply here.

Article 3 ADMINISTRATION

3.1 Application Requirements

A local agency must make application to the Board in order to participate in the program for each fiscal year. The application shall be submitted in triplicate and should consist of:

- a. A letter expressing the agency's desire to participate.
- b. A statement of the agency's long-range plans (Section 2.1).
- c. A summary of the agency's annual routine maintenance work plan (Section 2.2).
- d. A summary of the agency's rehabilitation work plan (Section 2.3) for the fiscal year in which the work will be accomplished.
- e. A statement defining the land use of the area protected by the levee as well as any planned land use changes.
- f. Acreage of the protected area and approximate number of permanent inhabitants.
- g. Method of assessment, assessed value, local agency tax rate for flood control, bonded indebtedness for flood control, and a summary of unpaid warrants for flood control work.
- h. Proof of application for federal disaster assistance, whenever eligible, under Public Law 93-288.
- i. If application is for reimbursement of work deemed ineligible for federal disaster assistance, Damage Survey Report and/or other pertinent documentation (Section 2.5) plus proof of costs incurred.
- j. A signed hold-harmless agreement, as described in Water Code Section 12992, for execution by the Board. The form for this agreement shall be obtained from the Board.
- k. Evidence that the agency's maintenance and improvement plans are in compliance or consistent with the California Environmental Quality Act. This requirement may be satisfied by a statement that the local agency has approved

1) Categorical Exemption, 2) Negative Declaration, or 3) Environmental Impact Report.

l. Evidence that the agency's maintenance and improvement plans comply or are consistent with the California Endangered Species Act and the Federal Endangered Species Act.

m. Evidence that the agency's maintenance and improvement plans comply or are consistent with the Clean Water Act and the Rivers and Harbors Act, as administered by the U.S. Army Corps of Engineers.

A local agency must also notify responsible and trustee agencies of any actions that fall within these agencies' jurisdiction. As required by law.

Fish and Game will prepare a detailed outline of documentation requirements to assist local agencies' compliance with the intent of this section and Section 2.3 of Part I. Article 2.

3.2 Application Deadline

With the exception of applications submitted pursuant to Water Code Section 12993, the application shall be submitted to the Department by May 1 for levee maintenance and rehabilitation work for the following fiscal year. Applications for Section 12993 work, i.e. work previously believed but determined not to be eligible for assistance under Public Law 93-288, may be submitted any time prior to June 30 of the fiscal year in which reimbursement is requested.

3.30 Approval of Application

The Department shall review the application and make recommendations to the Board. The Board will approve the application in whole or in part or disapprove the application. The applicant will be informed of the disapproval of any application or any part of an application.

Following are among the conditions that need to be satisfied for approval of the application:

3.31 Engineering

All plans shall be prepared and signed by a registered civil engineer and approved by the local agency. The plans shall indicate which field activities will be performed under the supervision of an engineer.

3.32 Department of Fish and Game Review

DFG shall review all local agency plans. Plans shall not call for the use of channel islands or berms with significant riparian communities as borrow sites for levee repair material, unless fully mitigated. Plans shall not result in a net long-term loss of riparian, fisheries, or wildlife habitat.

Costs required to meet DFG approval are eligible for reimbursement under the Subventions Program. DFG reserves the right to request additional information, pursuant to Section 3.1, it deems necessary to make a recommendation for approval of the application. DFG also reserves the right to disapprove applications that fail to meet the conditions set forth in these procedures, consistent with their role under SB 34 of ensuring no net long-term loss of habitat.

3.33 CEQA/NEPA Compliance

The local agency shall be the lead agency for purposes of CEQA.

3.4 Agreements

After the plans are approved, the Board and the agency shall enter into an agreement for the reimbursement of the costs of the work to be performed, in accordance with the approved application, with the provisions and policies of Water Code Sections 12980 et seq, with these Provisions and Criteria, and with the recommendations of the Department. The agreement will be submitted to the local agency for signature. Upon return of the signed agreement by the local agency, the Board will execute the agreement.

3.5 Inspection of Work

Upon completion of the agreed work, the local agency shall notify the Department, and the Department will inspect the work. If the work is in conformance with the approved plans and agreement, the Department will so notify both the local agency and the Board. If the work is not in conformance, the Department will point out the deficiencies, and upon satisfactory completion of any necessary remedial work, the Department will notify the local agency and the Board.

The local agency shall cooperate in the conduct of all inspections, including inspections by the Department, pursuant to Water Code Section 12989, to monitor and ascertain compliance with and progress toward meeting the standards in the State's Flood Hazard Mitigation Plan, as updated or amended.

3.6 Bookkeeping and Records

The local agency shall maintain records and books relating to the costs and quantities of labor and materials used, purchased, or contracted for in the performance of its levee maintenance and rehabilitation work.

The Board and Department shall have full and free access at all reasonable times to these books and records with the right at any time during office hours to make copies thereof.

The Department, the Board, or the State Controller shall have the right to conduct audits, on a periodic basis, of the local agency's expenditures for levee maintenance and rehabilitation. The purpose of such audits is to assure that subvention moneys are being properly used, that payments are not being made under different assistance programs for the same work, and that local agencies are seeking the best terms reasonable in its use of State funds.

The local agency shall cooperate fully in any such audits and shall maintain all receipts, accountings, books, invoices, and records pertaining to its levee work for a period of ten years after the work has been performed or the expenses therefore incurred.

Article 4 REIMBURSEMENTS

4.1 Eligibility

A local agency shall be eligible for reimbursement for work completed under the agreement with the Board in accordance with the following:

- a. No costs shall be reimbursed until the local agency has spent an average of \$1,000 per mile for all of its nonproject and eligible project levees.
- b. The local agency shall be reimbursed up to seventy-five percent of the costs incurred in excess of \$1,000 per mile for all of its nonproject and eligible project of levees.
- c. Nonproject levees which are not under the jurisdiction of an applicant agency but are in its system may be maintained under a formal agreement which results in costs to the local agency. Such levees will be considered the same as the local agency's other nonproject levees in computing State reimbursement.

4.2 Eligible and Ineligible Costs

Local agency costs incurred in the preparation and execution of the work plans, which meet the criteria and are a part of the Board approved plans, will be used to compute the amount of reimbursement. These costs must be associated with the fiscal year for which the application was made.

Reasonable costs for engineering, labor, materials, equipment rental, capital costs of rehabilitation and maintenance of non-project and eligible project levees (including appurtenances), and pro rata rental charges of agency-owned equipment are eligible for reimbursement. A survey of local rates will be used to ensure that rates charged to local agencies are justifiable.

The salaries, expenses, and fringe benefits of the executive board, executive officer in charge of the agency, their immediate stenographic support and the pro rata rent charge for their office and equipment are not eligible for reimbursement.

New construction or maintenance of drainage pumps and drainage ditches, with the exception of toe drains, are not eligible items for reimbursement. They are considered to be items which are incidental to flood control activities.

4.3 Agency Claims

The local agency shall submit a claim for reimbursement to the Board upon completion of the maintenance and rehabilitation work associated with the fiscal year (July 1 through June 30) for which application is made to the Subventions Program. This claim must be filed by August 30 of the following fiscal year. The Department will compute the amount of reimbursement to the local agency based on the claim submitted and the field investigation. The Department will then recommend to the Board certification for payment.

4.4 Certification for Payment

Upon receipt of the Department's findings that the work has been satisfactorily completed, the Board may certify payment and reimbursement of all or a portion of the estimated State share for immediate reimbursement.

4.5 Prioritization of Funds

If, in any year, the total eligible costs incurred exceed the State funds available, the Board will apportion the funds among those levees, or levee segments identified by the Department as being most critical and beneficial for flood control, water quality, recreation, or wildlife, in accordance with the following funding prioritization scheme:

- a. The first priority for funding is for levee maintenance, Fish and Wildlife, and rehabilitation up to the Bulletin 192-82 standards (for geometry) associated with the existing land use at the time SB 34 was signed into law.
- b. If available funds are sufficient to fully fund work described in 4.5a. (above), full reimbursement of claims will be made. When claims exceed available funds, full reimbursement of each claim will be made according to the categories listed below (in the order listed) until insufficient funds are available to fund a category. The claims in this latter category will be paid on a pro rata basis. Claims in lower categories will not be paid.

Category 1: The Reclamation Board mandated top priority funding items.

Category 2: Plans that make special provisions for protection or enhancement of fish and wildlife habitat, recreation opportunities or land use changes to reduce land subsidence or erosion. These provisions must be coordinated with the Department and/or DFG.

Category 3: Plans based on meeting the Short-Term Hazard Mitigation Standards (see Appendix).

Category 4: Plans based on meeting Bulletin 192-82 standards or PL 84-99 standards (see Appendix).

The second priority for funding is for portions of an individual district's fiscal year work in excess of an average of \$100,000 per mile of all non-project and eligible project levees.

The third priority for funding is for reimbursement of work in excess of bulletin 192-82 standards.

4.6 Advances

Upon submission of plans for maintenance and improvement of non-project and eligible project levees and approval by the Board, the local agency shall be eligible for advances in the following manner:

- a. The Department may provide, at its discretion, an advance to the applicant in an amount not to exceed seventy-five percent of the estimated State's share. No advance shall be made until the applicant has incurred costs averaging one thousand dollars (\$1000) per mile of non-project and eligible project levee.
- b. The amount advanced shall be subtracted from the final amount due to be reimbursed after the work has been completed and inspected. If after the work has been inspected and the Department finds the work unsatisfactory, or the advances made exceed the amount reimbursable, the local agency shall promptly remit to the State all amounts in excess of reimbursable costs. (The Board may require a bond to be posted to ensure faithful performance of the work set forth.)

4.7 Work Rejected by FEMA

If after the applicant has applied for federal disaster assistance under PL 93-288, it is determined that the work performed does not qualify for such assistance, the applicant may apply for reimbursement to the Subventions Program. The associated costs shall be deemed incurred by the applicant in the year in which the latter application is filed. Such work must be compatible with Articles 5 and 6 of Part II-Criteria of this document, and must have been denied reimbursement under Public Law 93-288, or the California Disaster Assistance Act.

Work items under this category must be clearly and separately indicated on the agency's application and all costs for work performed must be substantiated. The Department will review the agency's application and will determine the eligibility as if the costs were incurred in the fiscal year of application. The review of costs will be conducted as regular subventions work and is still subject to audit by the State Controllers Office.

If, due to a shortfall of funds, an applicant is not fully reimbursed for work rejected by FEMA in one fiscal year, the applicant may apply for the remaining reimbursement in the following fiscal year(s).

4.8 Documentation

The local agency may be required to provide proof of payment for work done under the Subventions Program associated with the fiscal year for which application is made, subsequent to the final disbursement of funds associated with that fiscal year.

4.9 Competitive Bidding

Neither the Department nor the Board is charged with the administration of SB 1893 (Ch. 1042, stats of 1988), which took effect on January 1, 1989. However, many of the provisions are pertinent to the Subventions Program. The administration of the Subventions Program in conjunction with SB 1893 requires clarification of some of the provisions of SB 1893, from the perspective of the Subventions Program.

Administration

The provisions of SB 1893 speak largely for themselves. All Subventions Work Subject to SB 1893 "in excess of \$25,000 shall be let to the lowest responsive, responsible bidder". If the District determines that no bids are in the best interests of the District, any or all bids may be rejected. The District may re-advertise, negotiate, or proceed to complete the project by Force Account. In any case, pertinent documentation indicating the reasons for the particular course of action should be retained. This documentation should clearly demonstrate that the concept of Reasonable Competition was adhered to, and consequently the price for the project met the lowest reasonable cost expectation.

As stated earlier, the District's contracting procedures should be in conformance with State law. Following are specific points that are important to the efficient administration of the Subventions Program. The responsibility for contract administration by the District should be clearly defined. A statement providing the name of the responsible individual should be included in the application to the Subventions Program. It should be noted that either unit price or lump sum type of contracts are acceptable; however, cost plus contracts should be avoided.

Audits

To ensure that the Districts are in compliance with the provisions of the Delta Levee Subventions Program as well as any other applicable provisions of law, periodic audits will be conducted. One of the primary goals of these audits is to ensure that the Districts are pursuing the lowest reasonable cost for levee projects. The retention of source documentation is important for these audits. Source documentation involves the concept of calibration when dealing with quantities. For example, barge tags by themselves do not represent adequate documentation. Some type of backup calibration is necessary to substantiate the unit quantity per barge. This calibration can consist of certification by a weigh master, or a test by the project engineer. In general, one of the responsibilities of

the contract administrator is the provision of quantities calibration, where applicable. Work performed by labor forces is best documented through original timesheets.

Audits may require access to contractor's books. Therefore, all contracts should include a standard clause providing for access to the contractor's books.

In general, when dealing with the District's records, especially for Districts that make use of more than one financial assistance program, the establishment of a separate account for Subventions activities is a great help in separating out costs for Subventions and other District activities. It is therefore encouraged that a special county account be set up for Subventions warrants.

Equipment Rates & Prevailing Wages

Eligible costs for equipment used in District Operations are limited to 90 percent of CALTRANS equipment rates published in the current CALTRANS publication entitled "Labor surcharge and Equipment Rental rates". These rates defined the maximum rate for which reimbursement under the Subventions Program is available.

The decision to base reimbursement on 90 percent of CALTRANS equipment rates was made for the following reasons:

This percentage limits the fixed component of these rates to include only depreciation with no provision for overhead or profit.

The variable component incorporates all maintenance and operating expenses including fuel.

If a District can demonstrate that these rates are too low for their particular situation, these rates can be adjusted upward on a case by case basis, at the Department's discretion.

Labor costs for District Operations and/or Force Account Work, eligible for reimbursement, are limited to the Prevailing Wage, or the actual hourly salary, whichever is lower.

4.10 On-Island borrow material

Definition and Limitations

The use of on-island borrow material, although not encouraged by the Department, is a reimbursable item under the Delta Levee Subventions Program. On-island borrow material is defined as material originating from within the Reclamation District. Following are limitations that apply when reimbursement is requested for use of on-island borrow material as fill for Delta levees:

- a. The material must be certified by a registered engineer as suitable for levee construction.
- b. The excavation of such material shall be limited to sites at least 400 feet from the crown of the levee. An exception to this limitation will be made in cases where material has been stockpiled immediately adjacent to the levee.
- c. Compliance with any and all applicable provisions of State law is required. Particular attention is directed to Section 1090 of the California Government Code and the provisions of Senate Bill 1893, which took effect on January 1, 1989.

Reimbursement Formula

Following are the reimbursable components associated with the use of on-island borrow material in levee rehabilitation:

- i.) Associated engineering costs
- ii.) Transportation and placement expenses
- iii.) Royalty of \$1.00 per cubic yard of material.

4.11 Claim Processing and Reimbursement

Eligible costs for reimbursement are limited to: (1) construction costs incurred in the fiscal year for which application is made, and (2) associated administrative and engineering costs incurred either during this fiscal year or within a six-month period preceding or following this fiscal year. Following is the procedure used to determine eligible costs under the Subventions Program for maintenance and rehabilitation activities:

Annual Routine Maintenance

The maximum allowable expenditures for annual routine maintenance are limited to \$20,000/mile of nonproject and eligible project levees. The \$20,000 cap includes the \$1,000/mile of local contribution toward levee maintenance required by SB 34 and AB 360. Any maintenance expenditures in excess of the \$20,000 cap will be given a priority equal to work under Bulletin 192-82 criteria.

In case of emergency, this maintenance cap can be exceeded. Emergency means imminent danger of levee conditions developing that could result in high repair costs or possible levee failure, as defined by DWR levee inspectors. Costs incurred under such an emergency are only reimbursable to the extent they are not covered by other agencies, such as the Corps of Engineers and/or FEMA.

Annual routine maintenance items include:

- a. Inspection of levees.
- b. Extermination of rodents and filling burrows to minimize seepage through the levee section.
- c. Shaping the levee crown.
- d. Repair and shaping patrol and access roads.
- e. Repair of minor slipouts, erosion, repair or subsidence of levee section.
- f. Removal of drift deposits and debris from levee and waterside berm.
- g. Control of seepage and boils, including installation of impervious cores in the levee section.
- h. Cleaning drains and toe ditches adjacent to the landside levee toe.
- i. Vegetation control including cutting, removing or trimming vegetative growth such as weeds, brush and trees to the extent necessary to inspect and maintain the levee and a five foot strip adjoining the landside toe.
- j. Repair or restoration of waterside slope protection.
- k. Planning for flood emergencies.
- l. The costs associated with removal of encroachments and restoration of the levee section are eligible. The costs incurred by the local agency to compensate for the loss of encroachments are not reimbursable under this program. In the case where pipes through the levee are raised above the floodplain, 50 percent of the cost of the pipe through the levee design section is eligible. Fifty percent of the costs to replace or repair reclamation encroachments, such as cutoff walls, may be considered eligible on a case-by-case basis when a shared benefit with flood control can be shown.
- m. Levee profiles and cross sections.
- n. Underwater surveys.
- o. All engineering services and associated administrative work in connection with the Levee Subventions Program, except specialized engineering work done in connection with rehabilitating levees to standards associated with proposed or ongoing change in land use.
- p. Other maintenance. This item would include miscellaneous items such as gates to control traffic on the levee, guard rails, etc.

Levee Rehabilitation

Improvements to levees, eligible for first priority funding, are separated into two categories: (1) levee rehabilitation to achieve the minimum levee dimensions to comply with Short-Term Hazard Mitigation Plan Standards, and (2) levee rehabilitation to Bulletin 192-82 criteria (possibly a Long-Term Hazard Mitigation Plan). First priority rehabilitation work is limited to \$100,000 per mile of non-project and eligible project levees. Work in excess of \$100,000 is included under second priority for funding, as explained on the funding prioritization scheme in the Article 4.

Levee standards are discussed in the appendix to the Procedures. For brevity, the Short-Term Standards are referred to as HMP standards and the Long-Term Hazard Mitigation Plan is referred to as Bulletin 192-82 criteria.

The following items are considered HMP work:

- a. Raising the levee to an elevation one foot above the 100-year flood frequency level. A tolerance of 0.5 foot (up to 1.5 feet above 100-year flood level) will be considered HMP work to make allowance for subsidence.
- b. Flattening waterside slopes to 1-1/2 horizontal to 1 vertical and/or landside slopes to 2 horizontal to 1 vertical.
- c. Widening the levee crown to 16-foot width at an elevation one foot above the 100-year flood frequency level.

Work that is considered eligible as part of the Bulletin 192-82 criteria includes:

- a. Raising levees to provide 1.5 feet freeboard for protecting agricultural land and 3.0 feet freeboard for levees protecting urban areas. Again, a tolerance of 0.5 foot to make allowance for subsidence is acceptable.
- b. Flattening waterside levee slopes to 2 horizontal to 1 Vertical, and landside slopes to 3 horizontal to 1 vertical or flatter. Constructing landside berms to increase levee structural stability.
- c. Widening levee crown to 16 feet after the desired levee crown elevation as specified in a. has been achieved.
- d. Replacing existing or constructing new patrol roads and/or upgrading patrol and access roads to provide greater width or structural section for levee inspection, patrol and flood fighting purposes. If an asphalt surface is desired, reimbursement will be only the cost of an equivalent stretch of gravel surface road. If an existing asphalt road is upgraded, reimbursement is eligible to the extent that no other agency is responsible for maintenance of that road.
- e. Providing turnouts, access roads and ramps as necessary.

f. Relocation of toe ditches, if required, as a result of levee rehabilitation to Bulletin 192-82 criteria.

g. Placing rock protection, or equivalent, on the waterside levee slope except where such rock protection is the responsibility of a federal agency.

In summary, the priority of funding for work under SB 34 when claims exceed the available funds is as follows:

There are two general limitations: (1) the maximum reimbursement for annual routine maintenance is limited to \$20,000 per mile of nonproject and eligible project levee, and (2) the combined total expenditures for first priority levee rehabilitation, which most often is the sum of Fish and Wildlife, HMP and Bulletin 192-82 work, is limited to \$100,000 per mile of non-project and eligible project levees.

A summary of the priorities is as follows:

a. Annual routine maintenance.

b. First Priority Rehabilitation:

(1) Reclamation Board-mandated top priority funding items.

(2) Plans that make special provisions for protection or enhancement of fish and wildlife habitat, recreation opportunities, or land use changes to reduce land subsidence or erosion.

(3) Work to meet HMP standards, described above.

(4) Work to meet Bulletin 192-82 standards and annual routine maintenance in excess of an average of \$20,000 per mile for all nonproject and eligible project levees.

c. Second Priority Rehabilitation:

The second priority for funding is for portions of an individual district's fiscal year levee rehabilitation work in excess of an average of \$100,000 per mile for all non-project and eligible project levees.

d. Third Priority Rehabilitation:

The third priority for funding is for reimbursement for work in excess of Bulletin 192-82 standards.

PART II

Article 5 LEVEE MAINTENANCE

Maintenance Definitions and Criteria: "Maintenance" means annual or routine activities to preserve all of the local agency's non-project and eligible project levee systems in its current condition. The following are examples of "maintenance":

- a. Inspection by the local agency to ensure that adequate maintenance is being carried out and that dangerous or unusual conditions are discovered early - as a minimum, levees shall be inspected by September 15 to allow time to correct dangerous conditions, in April to provide information to plan annual maintenance and repair, during and after periods of high water, and during and after periods of high winds which can accelerate wave erosion;
- b. Extermination of burrowing rodents and filling their burrows with compacted material;
- c. Shaping the levee crown to drain freely;
- d. Repairing and shaping patrol or access roads and controlling the weight and speed of all vehicles using patrol roads on the levee crown;
- e. Repairing any minor slipouts, erosion, or subsidence of the levee section;
- f. Removing drift deposits, debris, and litter from the levee and berm;
- g. Cleaning drains and toe ditches which are adjacent to the landside levee toe and which intercept seepage;
- h. Cutting, removing or trimming vegetative growth such as weeds, brush, and trees to the extent necessary to inspect and maintain the levee and a 5-foot strip adjoining the landside toe and retaining or planting vegetation in accordance with the current edition of "Levee Encroachment Guide for Vegetation on Project Levees" adopted by The Reclamation Board;
- i. Repairing or restoring rock protection except where such repairs are the responsibility of a federal agency - minor repairs can be made in cases of federal responsibility, if the appropriate federal agency does not perform these repairs expeditiously;
- j. Planning for flood emergencies to ensure the availability of adequate repair materials and equipment so that immediate action can be taken in the event of a flood fight;
- k. Removing or modifying encroachments which endanger the levee or interfere with maintenance;

I. Determining the profile and conducting a cross section survey of levees often enough to detect subsidence (normally at least every fifth year).

Article 6 LEVEE REHABILITATION

6.1 Rehabilitation Definitions "Rehabilitation" means improvements to levees which increase their physical integrity or degree of flood protection. The following are examples of "rehabilitation":

- a. Raising portions of a levee system to increase minimum freeboard or rectify effects of subsidence and/or erosion;
- b. Flattening slopes or constructing landslide berms to increase structural stability;
- c. Widening the levee crown and shaping to drain;
- d. Constructing or reconstructing a patrol road to provide greater width or a structural section adequate for all-weather traffic for inspection, patrol, and flood fighting purposes (all-weather is interpreted to be a gravel surface). If an asphalt surface is desired, reimbursement will be only for the cost of an equivalent stretch of gravel surface road;
- e. Providing turnouts, access roads and ramps as necessary;
- f. Placing rock protection, or equivalent, on the waterside berm and/or on the waterside levee slope when erosion may potentially endanger the stability of the foundation or the integrity of the levee, except where such rock protection is the responsibility of a federal agency;

PART III

Article 7 CARRYOVER

In some years, it may not be possible for the State to reimburse all districts up to the 75 percent level of eligible work. This is especially true when the amount of work actually performed by the local districts greatly exceeds the amount of direct pay available for disbursement.

Districts will be allowed to carry forward un-reimbursed eligible expenditures. Following is the procedure to accomplish full reimbursement of the State share in year(s) subsequent to one in which insufficient funds are available for reimbursement of the full 75 percent State share.

In the year of the shortfall, the amount available will be distributed among all districts according to the funding prioritization scheme specified in Article 4.5. The State's share of eligible expenditures in excess of the amount disbursed in that year will be carried over into the following fiscal year. If, at the end of this fiscal year, there are funds available after the State has reimbursed the districts to the full 75 percent level for priority one and priority two work, that excess will be applied to the amounts that have been carried over from previous year(s). The excess State funds will be used to fully reimburse carryover amounts according to the procedure described in the next paragraph. Any amounts remaining will be carried over again to the next year and so forth until all carryover amounts have been reimbursed, or the Delta Flood Protection Act terminates.

The earliest fiscal year, for which these Carryover Provisions apply, is the first fiscal year in which a shortfall of funds occurred after the enactment of the Delta Flood Protection Act of 1988. Supplemental payments to provide for full reimbursement to the State's 75 percent share for this earliest fiscal year and subsequent fiscal years of funding shortfalls will be made, using the funding prioritization scheme set forth in Section 4.5, as follows:

First Priority work, separated into subcategories, will be reimbursed first, in order of subcategory priority, for the earliest year of funding shortfall.

If there are still excess funds available, First Priority work for subsequent years of funding shortfalls will be fully reimbursed next, up to the current fiscal year.

In the event that First Priority work has been reimbursed to the 75 percent level for all districts in all years, Second priority work will be considered when excess funds are available. Starting with the earliest year of funding shortfall for Second Priority work, reimbursement up to the full 75 percent will take place.

If there are still excess funds available, Second Priority work for subsequent years of funding shortfalls will be fully reimbursed next, up to the current fiscal year.

Reimbursement-of Third Priority work will be considered only after all First and Second Priority work in all years has been reimbursed to the 75 percent level. As for cases of First and Second Priority work, reimbursement for Third priority work will start with the earliest year of funding shortfall and continue in subsequent years, if excess funds are available.

The above priority of payment scheme is not applicable to carryover expenditures from fiscal year 1987-88. All carryover work for that year will be accorded equal priority, since the funding prioritization scheme set forth in the Preliminary Procedures adopted in December 1988 was not applicable in that fiscal year.

The calculation of carryover amounts for any given year will be made by the Department. Each district will be notified in writing by the Department if any reimbursement claimed is to be carried over. Districts do not need to reapply in subsequent years for eligible costs carried over by the Department.

Article 8 LEVEE EASEMENT ACQUISITION

The Delta Flood Protection Act of 1988 (SB 34), which was signed into law in March 1988, included provisions for State reimbursement for the costs of easement acquisition by a local agency under the Delta Levee Subventions Program and the Special Flood Control Projects Program. SB 34 stated:

"The local agency cost of acquisition of the easements shall be reimbursable by the Department (of Water Resources) from moneys appropriated pursuant to paragraph (1) of subdivision (b) of Section 12300."

Levee easements are defined by SB 34 as:

"...up to 400 feet in width from the crown along levees in areas where the Department (of Water Resources) determines that such an easement is desirable to maintain structural stability of the levee."

This Article sets forth the requirements for State financial assistance to local agencies for levee easement acquisition.

Purpose of Easement acquisition

The purpose of easement acquisition is to assist in achieving or maintaining structural stability of Delta non-project and eligible project levees, in areas where the Department determines such easements would be beneficial to levee stability. Secondary benefits, such as the protection, or creation of wildlife habitat areas and the prevention of such future levee problems as encroachments, may also be a consequence of easement acquisitions.

To further the goal of levee stability, while assuring the island landowners reasonable rights, SB 34 requires levee easements to:

" (1) restrict the use of the land to open-space uses with minimum tillage of the soil, including, without limitation, non-tillable crops such as pasture, the propagation of wildlife habitat, and other compatible uses"

"(2) provide full access to the local agency for levee maintenance and improvement purposes, and"

(3) allow the owner to retain reasonable rights of ingress and egress as well as reasonable rights of access to the waterways for water supply and drainage. "

Funding

1. Funding Percentage

The acquisition of levee easements is not part of the regular Delta Levee Subventions Program. However, funding for these acquisitions parallels the funding of Subventions Program activities in a number of ways. State reimbursement for easement acquisitions is 75 percent of the total cost of easement acquisition including any associated engineering and administrative costs. A deductible amount of \$1000 per mile of non-project and eligible project levees is not applicable for easement acquisition reimbursement.

2. Funding Prioritization & Cap on Reimbursement of Easements

As mentioned above, the easement acquisition and Subventions programs are two separate, but related programs. The interconnection between these two programs is mainly due to the funding source, which is the same for both programs, i.e. the Local Assistance portion of the Delta Flood Protection Fund. Since funds are limited, a shortfall of funding may occur occasionally. Therefore, to the extent that applications for reimbursement of Subventions work and easement acquisitions may exceed State funds available, an interrelated funding prioritization scheme is necessary.

The funding prioritization scheme, described in Article 4.5, will be used in setting funding priorities for Subventions Program activities as well as easement acquisitions in cases of funding shortfalls. In order to limit curtailment of regular Subventions work, total funds available for all easement acquisitions in any given fiscal year are limited to 10 percent of the total Delta Levee Subventions Program direct pay funds allocated for that year. Insufficient applications for-easement acquisitions, or the designation of easement acquisition(s) as lower in priority compared to other Subventions activities can result in the expenditure of less than 10 percent of the direct pay funds for easement acquisition activities.

When a shortfall of funds occurs, the priority for reimbursement of easement acquisitions will be determined on a case-by-case basis. Prioritization of funds for levee acquisitions will generally depend on two factors.

- Potential flood control benefits achievable through levee acquisition.

- Other public benefits achievable through these acquisitions.

The higher the potential flood control benefits associated with the acquisition of a particular easement are, the higher the priority assigned to that acquisition will be. For borderline decisions between priorities, the second factor--degree of other public benefits--will be the deciding factor.

Following are the possible equivalent priorities for reimbursement of levee easement acquisitions that are defined by Article 4.5:

First Priority (Category 3): Plans based on meeting the Short-Term Hazard Mitigation Standards (see Appendix).

First Priority (Category 4): Plans based on meeting Bulletin 192-82 standards or PL-84-99 standards (see Appendix).

Second Priority: Portions of an individual district's fiscal year work in excess of an average of \$100,000 per mile of all non-project and eligible project levees.

3. Levee Acquisition as Contribution to Local Share for Subventions Program.

In certain cases, levee easements can be used as a contribution toward-the 25 percent (or more) local cost share percentage required for participation in the regular Subventions Program. Following are the conditions under which a local agency's acquisition of a levee easement could serve as all, or a portion of their local share cost:

- a. The Department confirms that the dedication of an easement is desirable in the maintenance of levee stability.
- b. The local agency acquires this easement through means of an in-lieu dedication, or some other means whereby no claim for any costs associated with the acquisition of this levee easement is filed.
- c. The resulting contribution toward the local cost share would equal 75 percent of the total value of the easement and any pertinent engineering and administrative costs.

Administration

1. A separate application in addition to the Subventions Program application will have to be submitted by the first of May preceding the beginning of the fiscal year for which reimbursement is sought. This application should be consistent with the long-range plans in the Subventions Program application, as set forth in Article 2.1 i.
2. The application should include the following:

- a. Map showing the location of the proposed easement.
 - b. Detailed estimate of all easement acquisition related costs.
 - c. Statement regarding the purpose and benefits of the easement acquisition. If easements are proposed because of levees in poor condition, an analysis of the structural stability of the levees in question will be required. This analysis should be done by qualified engineering firm.
 - d. Proposed schedule for the acquisition process. If the acquisition process is expected to run over into the following fiscal year(s), it should be noted. An updated application must be submitted for each fiscal year in which the acquisition process will run over.
3. A final claim for reimbursement of easement acquisition costs must be filed by the same deadline as final claims under the regular Subventions Program. This deadline is normally the last day in August following the end of the fiscal year for which application is made.

Again, this final claim must be separate from those filed under the regular Subventions Program. As with the itemized costs in any claim, full documentation such as invoices for services and copies of warrants must be included.

APPENDIX

Levee Standards

Following are synopses of the different stages of levee construction standards. Each of the standards is important for different reasons, which are also briefly summarized.

1. Short-Term Hazard Mitigation Plan Standards

As part of the requirements to qualify for future federal disaster assistance, local districts should adopt the following minimum standards:

- a. Levees shall have 1-foot of freeboard above the 100-year flood frequency elevations, as provided by the Corps of Engineers.
- b. The minimum crown width shall be at least 16 feet.
- c. Waterside slopes shall be at least 1.5 horizontal to 1 vertical, with revetment in areas where erosion has been a problem. The size of the revetment material shall be appropriate for the slope.
- d. Landside slopes shall be at least 2 horizontal to 1 vertical, with flatter slopes in the lower portion of the levee in areas where soil stability and seepage have been problems.
- e. The levees shall have all-weather access roads.

2. PL 84-99 Standards

The Corps has developed guidelines for the rehabilitation of Delta nonproject levees to allow for implementation of Public Law 84-99 in the event of a flood in the Delta. If non-project levees are rehabilitated to these standards and certified to that effect before a flood, federal disaster assistance may be available from the Corps. The Delta-specific standards which must be met to be certified a "flood control levee" include (but are not limited to) the following features:

- a. 1.5 feet of freeboard above the 100-year flood stage for all islands and tracts.
- b. The levee will have a 16-foot crown width with an all-weather patrol road.
- c. The minimum waterside slope of the levee will be 2 horizontal to 1 vertical.
- d. The minimum landside slope of the levee shall vary with the levee height and depth of peat.
- e. A levee toe drain will be located 30 feet landward from the landside levee toe.

3. Bulletin 192-82 Criteria.

The Department, as part of planning for the Delta Levees Study in Bulletin 192-82, called for the following criteria. SB 34 references these criteria:

- a. Minimum freeboard for levees protecting agricultural and urban land consists of 1.5 ft and 3.0 ft, respectively, above the one in 300-year flood elevations, as determined by the Corps.
- b. A typical improved levee section has a 16-foot crown width with a waterside slope of 2 horizontal to 1 vertical, and a landside slope of, at least, 3 horizontal to 1 vertical.
- c. Landside berms should be constructed where necessary to help provide stability for the weak, highly compressible, peat foundations. Slopes on the landside berms may have to be as flat as 15 horizontal to 1 vertical.
- d. In deep peat areas, staged construction, consisting of periodic raising of the levee crown, back slope, and the landside berm may be required to compensate for continuing subsidence.
- e. Construction of levees on a new alignment (levee setback) are to have a 12 foot crown width and slopes of 2 horizontal to 1 vertical on both the land and watersides.